

## REMARKS

Claims 43-60, 62 and 65-82 are pending; claims 44, 45, 55-60, 62, 70, 71 and 76 are withdrawn and claims 43, 46, 47, 51-53, 65-69, 65-60, 72-75 and 77-82 are under examination.

With this Amendment, claims 43, 55, 56, 80 and 82 are being amended and claim 81 is being canceled. The amendments are being made without prejudice against introduction of canceled subject matter into this or one or more timely filed continuation, divisional or continuation-in-part applications.

Claims 43 and 82 have been amended to recite positive and/or negative selection for an organism marker as described, *inter alia*, on page 14, second paragraph and page 24, first paragraph. Claim 80 has been amended to incorporate the subject matter of canceled claim 81. Claims 43, 80 and 82 have also been amended for clarity purposes in response to the 35 U.S.C. § 112, second paragraph rejections.

Claims 55 and 56 were withdrawn from consideration because of their dependency on withdrawn claim 44; these claims have been amended to depend from claim 43, which is under examination. It is therefore requested that claims 55 and 56 be rejoined for examination.

Thus, after entry of this Amendment and rejoinder of claims 55 and 56, claims 43, 46, 47, 51-53, 55, 56, 65-69, 65-60, 72-75 and 77-80 and 82 will be pending and under examination.

### Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 43, 46, 47, 51-53, 65-69, 72-75 and 77-82 stand rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite.

Claims 43, 80, 82 and their dependents are rejected on the basis that they recite “a step” which in turn comprises a plurality of steps. The claims have been amended to refer to a plurality of “steps” rather than “a step.” Accordingly, the rejection is obviated and should be withdrawn.

Claims 66 and 69 and their dependents are rejected on the basis that there is insufficient antecedent basis for the recitation of “the at least one organism marker.” Claims 66 and 69 ultimately depend from claims 80 and 82, respectively. As amended, claims 80 and 82 recite “at least one organism marker,” thereby providing antecedent basis for the recitation of “the at least one organism marker” in claims 66 and 69. Accordingly, the rejection has been obviated and should be withdrawn.

### Rejection Under 35 U.S.C. § 102(a)

Claims 43, 46, 47, 51-53, 65-69, 72-75 and 77-82 stand rejected under 35 U.S.C. § 102(a) as being allegedly anticipated by Stein *et al.*, 1996, J. Bacteriol. 178(3):591-599 (“Stein”). Specifically, the Examiner alleges that Stein teaches all the elements of all the claims, including subjecting an organism sample to “filtration” and “various selections such as size selections.” Applicant traverses the rejection.

First, filtration indiscriminately concentrates cells in a sample rather than capture or exclude cells from the sample based on defined criteria, and therefore is does not constitute selection.

Second, the only “selection” carried out by Stein at the cell (as opposed to nucleic acid) level is a filtration step, which is at best a size selection. In contrast, the claims as amended all require subjecting an organism population to positive and/or negative selection on the basis of an organism marker, *e.g.*, a phenotypic (such as a biochemical marker) or genetic marker characteristic of an organism. See specification at pages 18 and 27-30 (teaching the use of various biochemical and genetic markers). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Stein does not teach each and every element set forth in the claims, at the very least because the only “selection” criteria to which Stein subjected his environmental organism sample is a size selection, which as discussed above is not an “organism marker” as claimed herein. Accordingly, Stein does not anticipate the subject matter of the present claims.

### Conclusion

All pending claims are believed to satisfy all of the criteria for patentability and are believed to be in condition for allowance. An indication of the same is therefore kindly requested.

No fees beyond those specified in the EFS-Web Fee Calculation Screen, or accompanying Fee Transmittal, are believed to be due in connection with the submission of this paper. However, the Director is authorized to charge any additional fees that may be required, or credit any overpayment, to Deposit Account No. 010528.

Respectfully submitted,

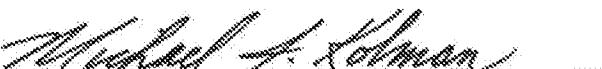
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